THE CAUSES OF RISE AND FALL IN THE POPULATION OF THE ANCIENT WORLD.

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EUGENICS, in the modern sense, is a very recent branch of knowledge: an art, or an applied science, utilizing experience for the improvement of the future. And hitherto most of this experience has been experience of the immediate present, or at least of the very near past. Further back, the evidence was not collected, mainly because its value was not seen. Yet the problems to the solution of which we try to apply it were already perceived, and attracted more than merely theoretical attention, in the ancient world.

It is one of the attractions of ancient history, that we are sometimes able by its help to make intelligent anticipations of the course of current events. History never repeats itself, but the forces whose interaction makes history are not very numerous, and many of the ways in which they operate have been formulated: many more can be described in an intelligible way, though not with scientific accuracy; and their interactions can be followed in particular instances, sometimes through a number of phases, with a confidence which varies with the accuracy of our estimates of each several factor. It is, therefore, possible to compare situations and processes within our own experience, and as yet incomplete, with essentially similar situations and processes of which the outcome is, as we say, a matter of history. Our comparisons and analogies may be inexact in detail, and leave a large margin for our own misapprehension of the facts; but history is, as surely as geology, a comparative science, and in the light of the fossil politics which make so large a part of history we can estimate the outcome of policies and modes of life in much the same way, and with the same degree of assurance as we can predict the transformations of a river, valley, or a coastline, under given conditions of structure and

climate. We cannot be sure that no catastrophe will occur, to change the "course of nature" altogether; but putting catastrophe aside, we have a good deal to learn about the future of man from our study of his past.

This is my apology for submitting here a sample of ancient eugenics, in which theory, and practical politics, and the mere course of nature, can be watched playing upon one another through at least a thousand years, and producing quite early in that period effects which resemble some which cause us anxiety in our own world too. We shall see populations overtaking the means of subsistence in a limited region; the relief of this congestion by colonization oversea; the complete occupation and development of the colonial regions; the pacific penetration of the regions of stable or less progressive culture by an aggressive civilization, itself in rapid development; forcible dispossession of obstructive occupants, and no less forcible elimination of competitors for maintenance within the home circle of the conqueror; a veritable struggle for existence, under the thin veil of one of the world's greatest achievements hitherto. How to control population, both in success and in defeat, was in fact one of the great perennial questions for ancient statesmen and for fathers of families. In theoretical politics too, the problem is an old one. As far back as there has been a "political science" at all, its subject has included more than the external relations between the persons who compose the state; it has always considered as lying within its province the collateral question, what kind of person is the best member of the state; and how is the proper supply of such persons to be secured? And here, too, Greek thought had not gone far, before the subject fell into two parts: how to get the proper breed of man, in the first instance; and then how to preserve him from deformation. And to Greek thinkers of the fourth century it seemed obvious that the supreme remedy for such deformation of naturally good quality was to regulate the quantity: to discover, as Plato puts it, "the Number of the State," and keep the population at that number.

No other ancient people seems to have displayed this anxiety about "the Number of the State." Eastern monarchies valued

population, as they valued area, as the basis of military power. In a theocracy, where the source of power was conceived as superhuman, a king who "numbered the people" was suspected of revolt against God. In the same way, the militant republic on the Tiber, ringed round with populous highlands, supplies in its census rolls the only coherent statistics which have come down to us from an ancient people; and their purpose was purely military.

We have first to note the modern course of the enquiry, before we deal directly with ancient evidence. For as in other historical problems, our own standpoint is prepared for us, in part at least, by the perplexities of those who have worked at it before us. Renaissance scholars, dominated by the belief common to ancient and modern despotisms, that a large population is necessary to the well-being of the State, inferred, not unnaturally, that the most prosperous States, and periods of history, were blessed with large populations. They therefore tended to exaggerate the populousness of the Mediterranean world during the period of Græco-Roman civilization, until Montesquieu estimated it at double the modern population.[1] Critical study of the question began with David Hume,[2] who argued the improbability of these large estimates, and even of the slave totals recorded by Athenæus. Hume's view, though repeatedly challenged, was only superseded by Boeckh,[3] whose great learning, and generally scientific method were devoted to maintain the high ancient figures, and encouraged lesser men to guess far beyond them, Niebuhr alone protesting.[4] Meanwhile Gibbon[5] had been led to the conclusion that the population of the ancient world had risen to a maximum in the Antonine Age, and had then declined rather rapidly; and Zumpt,[6] criticizing Gibbon's details, agreed with him as to the fact of a decline, though he placed the culmination in the sixth century B.C., at the close of the period of Greek colonization.

[1] Montsequieu. *Lettres Persanes.* No. 112.

[2] David Hume. *Essay on the Populousness of Ancient Nations*, in *Political Discourses.* Edinburgh, 1752.

[3] Boeckh. *Staats-haushaltung der Athener*, I. 52.

[4] Niebuhr. *Römische Geschichte*, 1830, II., 80.

[5] Edward Gibbon. *Decline and fall of the Roman Empire*, II., 59.

[6] A. W. Zumpt. *Abhandl. Berl. Akad.*, 1840, pp. 1-92.

Clinton,[1] though his maps were inadequate, had attempted to correlate populations with areas, and Wietersheim[2] had compared an estimate of the modern populations with the ancient data, and had called attention to contrasts between ancient and modern agriculture, as limiting factors: he was also able to revise Clinton's estimates of area. Similar economic factors had already been brought into consideration by Dureau de la Malle,[3] in a work which stands side by side with that of Boeckh. Bunsen's argument[4] from the Roman corn-doles is another early use of collateral economic data. The first separate study of urban populations is that of Pöhlmann.[5] All older work was superseded in 1886 by Beloch,[6] whose essay on the population of the Græco-Roman world is still the best general introduction to the subject. Beloch's estimates are so cautiously framed that the tendency of subsequent work has been to raise them slightly in detail, but without seriously affecting the proportions between them. Of collateral questions, the most important contributions since Beloch's work have been those of Edward Meyer, Nieboer, and Zimmern, on slavery[7]; of Francotte[8] on Greek industry; of Glotz[9] and Sundwall[10] on the deliberate restriction of increase, and of Gernet[11] and Grundy[12] on the general question of Greek food supply. The most notable revision of estimates, particularly for the Persian Empire, and for Greece in the fifth century is that of Cavaignac.[13]

Imperfect as the evidence is, as to the actual population of the ancient world, or any but a few sections of it, at any given

[1] Clinton. *Fasti Hellenici*, II., Oxford, 1824.
[2] Wietersheim. *Geschichte der Völkerwanderung*, I., pp. 169-269.
[3] Dureau de la Malle. *Economie Politique des Romains*. Paris, 1840.
[4] Bunsen. *Beschreibung Roms.*, I., 184.
[5] Pöhlmann. *Die Uebervölkerung der antiken Grosstädte*. Leipzig, 1884.
[6] Beloch. *Die Bevölkerung der Griechisch-Römischen Welt*. Leipzig, 1886
[7] E. Meyer. *Forschungen*, ii, 185.
Nieboer. *Slavery as an Industrial System*. The Hague, 1900.
Zimmern. *Sociological Review*. Jan.-April, 1909.
[8] Francotte. *L'Industrie dans la Grèce antique*. Brussels, 1900-1.
[9] Glotz. *Etudes sociales et juridiques*. Paris. 1906.
[10] Sundwall. *Heiratsalter und Kinderzahl, Klio* (Nachträge iv).
[11] Gernet. *L'approvisionnement d'Athènes en blé au cinquième et au quatrième siècle.* (Bibl. Fac. Lettres de l'Université de Paris). 1909.
[12] Grundy. *Thucydides and the History of his Age*. London.
[13] Cavaignac. *Histoire de l'Antiquité*, II., III. 1912-14. Volume I. is not yet published; volume II. begins with an estimate of the resources of the Persian Empire under Darius.

period, it is possible nevertheless to trace certain large movements of rise and fall, and to assign approximate limits in time. The most conspicuous instance is in the Roman census totals, where the numbers rise steadily from 214,000 in the year 204, after the terrific losses of the Hannibalic War, to 337,452 in 164, and then fall to 317,933 in 136, and 318,823 in 131; rising again suddenly to 394,736 in 125, and to 910,000 in 70, this time in consequence of known political changes, whose effects can be discounted. These are, of course, not records of the whole population, but as they represent the men of mature age from an important region of peninsular Italy, and eventually, in 70 B.C., from almost the whole, they may be taken as a good index of it; and as there is no reason to think any one of them less trustworthy than the rest, they are in the full sense comparable with each other.

For the long period before the first adequate data, we can, of course, only deal with large general considerations, geographical and economic; but as these are applicable also to the later periods, it is necessary to discuss them in some detail, and their effects can be most clearly shown when their operation is not complicated, for us, by more transient political or individual movements.

In the first place we have to distinguish, in the ancient world, at least three distinct types of geographical region, linked with three types of economic regime. There are the great continuous flat-lands of the north and south, Scythia, Arabia, and Libya, and their miniature counterparts, the intermondane plateaux of Asia Minor, Hungary, and Spain. Here human activities were limited essentially by the supply of grass: society is pastoral and at least seasonally nomad; polygamy is as common as the food supply permits, and children have economic value; the boys as shepherds and goatherds, the girls as wealth, exchangeable for more cattle. On the flat grass-lands the societies are stable, in the sense that nomad pastoral existence is the only mode of life which permits man to live there at all: but the geographical regime is at the same time unalterable by man, and liable to large secular modifications which are quite beyond his control. The result is that whereas all expansion of the

vegetable basis of subsistence can be compensated within half-a-century by natural increase within the grass-land societies themselves, all contraction makes an immediate surplus of men and increases the exodus which is always going on round the margins of these regions. These are in fact regions of what I can best describe as high man-pressure; permanent anticyclones in the human envelope of the earth. Their output of men across their margins may be less or greater, but it probably never quite ceases; and under extreme conditions it may become very copious.

For these regions we have no trustworthy figures, and very few estimates, either ancient or modern. All we can say is that for the reasons given already, the grass-lands are (1) very thinly populated, (2) usually as full as they can hold, and practically impervious to immigration, unless and until an immigrant comes armed with some device for making the steppe grow something other than grass. In the event of a defect of sustenance, surplus population is easily and rapidly removed, for it is migratory even at home; if population falls short, it is easily replenished, for polygamy is permitted by custom, and children are valued. It is only anti-social persons like Hagar who are eliminated, in the literal sense, with their offspring.

Next, traversing the great flatlands in abrupt-sided canyons, from far-off mountain sources to maritime delta-swamps, there are the great river valleys of the subtropical desert-belt. Their flood-beds within the canyon, and the heads of their deltas, are capable of great fertility under irrigation, and support a dense sedentary population of cultivators. Unlike the great tropical river cultures, which are fed on rice, Egypt and Babylonia grow wheat, using draught animals for ploughing, threshing, and carrying; and maintaining them on crop-refuse, fallow, and unreclaimed marshland. Like the tropical river cultures, however, these civilizations are stable; that is to say, nothing short of a derangement of the geographical surroundings avails to modify the essential characters of the societies which maintain them. At most, minor fluctuations of fertility permit the luckier and more provident cultivators to accumulate capital, and eventually to finance industries such as weaving, glazed-ware, and jeweller's

work, first for local or palatial use, then for exchange abroad against timber and other raw materials, or foreign rarities. Egypt's isolation restrained such trade and industry, and therewith the growth of an urban population, until the Greek conquest. Here the limit of population is set by the efficiency of the central authority. A strong enough king made a fully populated Egypt, for he could ensure that the Nile water was fully and fairly distributed, and organize a national corn reserve against years of low Nile. But Babylonia, more central, and better connected with neighbouring regions, developed early, and maintained throughout, a capitalist regime and an industrial population, large enough to create and maintain irrigation works of sufficient extent to feed it. Here too the limit was set by administrative efficiency; and great religious corporations held capital enough in trust, to insure their laity against famine by organised industrial undertakings.

Here, too, though we have no adequate records of population, the general situation is clear. The country is as full as it will hold, and great renown comes to the man who can "enlarge its borders." Epidemics and war, as in modern India, make havoc now and then; but it is quickly repaired, for it is seldom universal, and communications are good. Children are well looked after by their parents, both in Egypt and in Babylonia; the king and the gods, being great employers, have a kindly eye for the fatherless and the widow; and in Babylonia there is even public provision in case of neglect. Hammurabi's Code for example provides (§ 193) for a dead man's children if the widow neglects them. Unwanted children could be legally adopted, and it is probable that illegitimate children whom no one wished to adopt could be sold by the State; but anything like infanticide, as a custom, was out of the question.

The third type of region and regime is that of the Mediterranean lands. While it is characteristic of the greater part of the coasts of the Midland Sea—the "Great Lakes" of the Old World—it is not restricted to these, but extends far along the folded mountain zone, from the Pyrenees to the Caucasus and the Persian highlands, wherever the "Mediterranean" type of climate is maintained, with its hot rainless summer, and its com-

paratively cool moist winter. It passes gradually, of course, round the margins of the great flatlands, into opener rolling country with parkland and arable meadow, and so into steppe as the winter rainfall diminishes: and inversely, towards the Atlantic seaboard, or wherever locally the summer rainfall is enhanced by altitude or prevalence of sea breeze (as for instance on the west side of the Balkan Peninsula), its normal evergreen vegetation becomes mixed with deciduous trees of larger growth. Between these transitional zones, however, the moderating influence of so large a mass of water as the Midland Seas (including in these the Adriatic, the Ægean, the Black Sea, and in principle also the Caspian), preserves a remarkable uniformity of climate and vegetation, and of the human activities which these permit. And when we speak of the Ancient World, it is rather of this Mediterranean region that we are thinking, than of the flat-land regions with their nomad pastoral inhabitants, or even of the riparian civilizations of the Nile and the Euphrates.

I have spoken of the great river-cultures as stable regimes, in the sense first that the limits of human exploitation (apart from modern expansions due to mechanical power) were approximately ascertained and reached some thousands of years ago; and secondly that since that initial attainment there has been no disproportion between the human population and the means of subsistence, serious enough to result in either an exodus or a change in the mode of living, or in the social order.[1] The human activities of the Mediterranean region do not seem to have been so clearly described or defined, as those of the other two types. This is partly because the whole study of Mediterranean societies has until recently been conducted with very slight attention to any other kind of demography; partly for the special reason that it is only within the last generation that we have realized that there was possible here any of that deeper chronological perspective which is familiar to students of Egypt and Babylonia, or even to students of a grass-land margin, as it is

[1] This of course only applies fully to Egypt. Babylonia suffered just such a "catastrophe" as was contemplated in an earlier paragraph; for the waterworks were neglected by the Mongol conquerors in the thirteenth century, and a large part of the irrigable area went out of control. Yet what remains in use is utilised in the ancient way.

illustrated in the history of Israel. It was only in 1872 that the first stratified site in the Eastern Mediterranean was excavated by Schliemann at Troy; Phylakopi in Melos was not excavated till 1895, and Knossos not till 1900. Even in the West Mediterranean the lake-dwellings and terremare were untouched till the sixties; the first general agreement as to their significance dates from the Bologna Congress of 1874; and the prehistoric layers under the Roman Forum were untouched till 1902.

The discovery that in the South Ægean an independent civilization came into being within the same period as those of Egypt and Babylonia, and that it was shared by a large population over a considerable area for nearly a thousand years, before its collapse in the twelfth century B.C., changes altogether our estimate of the newness and originality of the Greek civilization which succeeds it, at all events as regards its economic substructure.[1] The great store-rooms, oil jars and oil presses of the Cretan Palaces, and the inventories of various sorts of tribute in kind, illustrate the centralized organization of an Ægean agriculture essentially similar to that of to-day; and the ups and downs of smaller country places like Gournia and Palaikastro show how this centralization affected the arts, the prosperity, and even the populousness of provincial districts. At present we have no statistics; but the distribution of settlements and cultivation terraces of the Minoan, Hellenic, and mediæval and modern periods suggest that the cultivated area of Minoan Crete was probably rather larger than that of later periods, and the population greater; for there is no reason to believe that the fertility of the soil has been diminished, or the methods of farming improved, since the Minoan Age.

Our evidence, such as it is, is naturally fuller for the central areas of Crete and the Cyclades, in which Minoan civilization grew up, than for the mainland regions into which it spread in the late Minoan Age, between 1800 and 1400 B.C. Here, as in earlier. Crete itself, exploitation was gradual. In Argolis, for

[1] This is better realised west of the Rhine than east of it. Pöhlmann, for example, still discusses early Greek society as if its sole knowledge of agriculture descended from an "indo-germanische Urzeit"; even "noch nach der Occupation der südlichen Balkanhalbinsel" agricultural organization was "so wenig entwickelt" that common ownership prevailed. *Geschichte der sozialen Frage und des Sozialismus in der antiken Welt.* 1912. I. p. 6.

example, were occupied early and effectively; Laconia very late, and partially. Attica was late, too; but when the chance came, penetration was general here. We may probably regard this extension of Minoan life to the peninsula mainland as evidence of over-population in Crete itself, and perhaps also in the other islands; and certainly we must interpret in this sense the far more extensive and rapid spread of Ægean settlements, this time chiefly of mainland or "Mycenaean" type, in the "Third Late Minoan" period which opens after the Fall of Knossos about 1400 B.C. These settlements are spread from Cyprus and Philistia eastwards, to Tarentum and Syracuse in the west, and as far north in the Ægean as Lemnos and the seaboard of Thessaly. The whole movement lasted nearly three centuries, and in its latest phases began to affect the west coast of Asia Minor, hitherto impervious, though Rhodes and other islands of its fringe were occupied fairly early in the period.

It is not easy to correlate this coherent set of data, derived from the distribution of sites and areas of exploitation, with the more fragmentary evidence of the human remains from the same region, which shows, intruding into Crete and the islands, a type of man characteristic of the mainland mountain-zone both east and west of the Ægean. In the Cyclades, where the evidence is mainly early, and the Mediterranean and Alpine types seem to be distributed haphazard, it looks as if both were in competitive expansion from the beginning of the Bronze Age; but in Crete there is a marked increase of the Alpine element in the late Minoan periods, and as this increase is most marked at the ends of the island, which lie nearest to the two mainlands, we have to recognize an inward movement into Crete, at a time when the Ægean coasts as a whole are colonizing widely outwards. The two trends are however compatible; for central Crete was receiving settlements of Ægean but non-Cretan culture, after the Fall of Knossos, and it is quite likely that the immigrants were partly or even mainly of the mainland Alpine type.

Somewhere in this period of oversea colonization we probably have to take account of another intrusive element, of more distant origin. The Achæan overlords who are represented as

dominant in peninsular Greece, from south Thessaly to Crete and the Asiatic island fringe, and their rivals the Trojan and Phrygian overlords of the north and east foreshores of the Ægean, right and left of the Hellespontine region, have in common the worship of the "Olympian family" of deities, and the free use of homebred horses in war; and there is some reason to believe that the Indo-European speech of the Achæans was not far removed from the language of the contemporary intruders in the Thraco-Phrygian region; though there is no direct evidence of the latter. At all events the Homeric poems presume free intercourse on the battlefield between Achæan and Trojan warriors, and make no mention of interpreters. We are probably justified in accepting the popular view that in the Late Minoan age there was a considerable inflow of fresh folk, habitual horse-riders organised in patriarchal clans; and the former characteristic makes it unlikely that their point of departure on this southward adventure lay short of the Danubian grass-lands or the South Russian steppe.

Immediately following the grass-land invaders, Greek tradition places another movement which recalls on the one hand the intrusion of Alpine types, which we have already noted as in progress slightly earlier, and on the other resembles in its general character and effects the southward spread of Albanian highlanders into Greece in the fourteenth century A.D. And it is noteworthy that in the same obscure but not very long period, from the eleventh century to the ninth, Greek tradition also places a fresh movement of Carian folk from the south-west of Asia Minor into the islands.

It is difficult to find any one human cause for two movements so distinct geographically; and it is even more difficult to correlate socially or politically the intrusion of the northern grass-land peoples in the preceding centuries with the contemporary pressure of nomad pastoral peoples "from beyond Jordan" into the Palestinian foreshore. In both cases we must look for some large geographical change. Now it is already a familiar notion, since the work of Ellsworth Huntington,[1] that the intermittent eruptions of nomad pastoral people, round the

[1] *The Pulse of Asia;* 1907. *Palestine in Transformation.* 1911.

margins of the great grass lands, are to be correlated with periods of minimum rainfall, or rather with the onset of a period of diminishing rainfall, over the north-temperate region, and I have already made elsewhere[1] the suggestion that increasing and maximum rainfalls, while they tend to keep the grass lands fertile and quiescent, have the opposite effect in highland regions, curtailing the summers, spoiling hay and harvests, and driving highland peoples down-valley into regions where the Mediterranean type of climate would be in process of enhancement from the same cause, with less intermittent river-flow in the dry summer, and moister growing times in spring and autumn.

I have dealt at some length with these very general considerations applicable to the pre-Hellenic Ægean, for two distinct reasons. The first is because they illustrate the multitude of new glimpses into the earlier history of the Mediterranean population which are revealed by recent archæological work, and particularly because they seem to show that the world in which the Greek people came into being was not in any sense virgin soil. It had already borne and brought to maturity a whole cycle of civilization, in comparative seclusion, and had then seen it collapse through a combination of internal and external stresses. In particular we can now see what historic fact lay behind the old Greek belief that in the days before the Trojan War "the world was too full of people"; so that the war itself seemed in retrospect a divinely appointed remedy. In spite of invasion and transmigration, this way and that, there clearly was lost ground to be recovered, when things began to settle down; but the main fabric of civilization, in the shape of cultivation terraces, water channels, farmsteads, and all that Homer groups together as the "works of men," were already there, except where a torrent had broken loose here and there during the troubles. One great piece of reclamation, indeed, which had been achieved in the Minoan Age, was never repeated in the Greek period, the draining of the Copaïs. Minoan Bœotia must be imagined with the fertile heart which the English company has restored to it in the last twenty years, not

[1] Proc. Brit. Ass. Adv. Sci., 1912 (Dundee), pp. 534-5.

with the pestilent swamp which the old Greeks knew, barring all roads but one, between Thebes and Orchomenos, and determining the battle fields of Chaeroneia and Coroneia. And in the same way, the complicated road system of Minoan Argolis owes its preservation mainly to the fact that it was almost disused in historic times. Out in the west, too, Nestor's Pylos, "sandy Pylos" even then, was a city of the first rank in the thirteenth century B.C.: once deserted, however, when the Neleids were expelled and moved to Attica, the sand dunes swept over its ploughlands, and in Hellenic times even its situation was not known for certain.

The other reason why these early movements of invasion are of interest is on account of their complete contrast with the immunity and insulation of Hellenic Greece. With the one exception of the Gaulish raid of 275 B.C., no foreign blood seems to have reached Ægean shores between the twelfth century B.C. and the fourth century A.D.: for the Kimmerian invasion in the seventh century affected mainly the inland districts of Asia Minor, and hardly seems to have touched the west coast: the only Greek city damaged by raiders from over the Hellespont was Magnesia-on-Meander, which lies some miles inland. There was a good reason for this. It sounds like a paradox, but in the present sense I think it is true, that a free Greece needed a strong Macedon. Only with the northern passes closed by a hardy half-barbaric neighbour, could the Greek cities in the south live out their life-histories unmolested. It was the crime of Crœsus of Lydia, on the other hand, as Herodotus saw, that by neglecting the eastern defences of the Ægean he reopened an "eastern question" which had been closed since the Trojan war. But Persian aggression did little to affect the composition of the Greek people; the effect of its neighbourhood, on the growth of the Greek states, was of a quite different kind, as we shall see.

From these two considerations taken together—the long previous history of the Ægean world (and particularly its complex ethnology) and its subsequent seclusion until and throughout the Hellenic period—a further point emerges, which may be conveniently dealt with here. The Greeks were themselves quite

clear on three points in their own pre-history; that they were of mongrel ancestry; that somewhere in that ancestry there was some one strain to which they owed their birthright as "children of Hellen"; but that Hellenism had also in some sense been communicated by intercourse to others who were not of the chosen seed. Now it is worth noting, first, that this composite explanation of an obviously composite nation is confirmed in its main outlines by the recent evidence as to physique and culture which I have summarized above; and next, that these are just the conditions for the breeding of a fresh, vigorous, and specially adapted variety; namely a period of multiplex interbreeding of distinct stocks, followed by a second period of seclusion under rigorous environmental control.

Now the Mediterranean climate and the rest of the Mediterranean regime do in fact exert rigorous control over man. In modern Greece only about one child out of three survives to its first birthday, the sudden chills of the fickle winter weather, the blazing summer sun, the precarious water supply, and the temptations of copious soft fruits in early autumn, being the chief sources of trouble. Ancient survivors ran the gauntlet, as shepherd lads, of wolf and lion, precipice and thorn brake, in the simplest blanket garment, living on meal cakes, goat cheese, and a handful of olives, exposed to the sore eyes, and septic cuts and scratches, which are the curse of the modern villager. No sooner were they mature than they entered the "greater game" of habitual seasonal war, hand-to-hand combat with athletes like themselves. Strength and speed and endurance, and (above all) skill were the only armour worth wearing. Marriages, it is true, were arranged in due form between the parents, and in later days the young couple did not necessarily meet before the wedding day. But earlier, in the centuries when Hellas was in the making, there was arduous courtship beforehand, and bucolic poetry is there to testify how this happily survived in the backwoods. There were runaway matches in the towns too, if we may trust the comedians. Here were the cradle and nursery of a sturdy, not ungracious breed, intimately adjusted to its peculiar haunts in the minute plains between the mountains and the sea; highlanders at beach-level who could

plough, and fight, and row a war canoe, and hunt wild bull or lion, and swim the Hellespont for a pretty girl. All that the most exacting eugenist would require is that there should be either so large a supply of such Greeks-in-the-making, or (what comes to the same thing) that the margin of subsistence should be so narrow, that there should be real selection of the fittest. And the fact that the seasonal wars were mostly, in the last resort, about ownership of corn-lands makes it pretty clear how this condition was fulfilled.

We come now to the most conspicuous fact of population in the whole of Greek history, the colonizing movement of the centuries from the eighth to the sixth. Here we have still no statistics to control our general impressions, except the total number of new foundations, which is comparable with the total number of autonomous states in the Ægean world at the time when the movement began. But it would not be safe to say that as many Greek colonists left the Ægean as there were Greek citizens remaining at home. Anything like bisection of the adult male population of a Greek city, on the occasion of a colonial enterprise, would almost certainly have disorganised its society and imperilled its security among its neighbours. Some of the western colonies, at all events, are described to us as joint enterprises from the first; and when a state like Miletus is credited with eighty or ninety colonies, it must probably be supposed that the mother city took the responsibility for the selection of a site, and for initial organization and transport, but that many of the colonists were volunteers from elsewhere, or at most had been resident aliens in the "metropolis." This was certainly so in one of the latest colonies, where we have a summary of the prospectus. The Corinthians, refounding Epidamnus in 435 B.C., advertised publicly for colonists, guaranteeing equal privileges to all comers, whatever their place of origin. Here then we find repeated the conditions of intermixture followed by segregation under a fresh external control, which we have already studied in the making of the parent stock.

The course of events which led to this outburst of colonization may be reconstructed fairly clearly. The disturbances at

the close of the Minoan Age had forced open at least three new areas of settlement; the east coast of the Ægean which is the foreshore of Asia Minor; the Chalcidic section of the north coast, which is the foreshore partly of Macedon partly of Pæonia; and the south coast of Italy, which becomes Magna Græcia. In the last named, and particularly in its middle section, from Metapontum to Sybaris, the geographical conditions are in some ways so different from those of Greece, and particularly from those of the Corinthian Gulf coasts, from which the settlers came, that the growth of these West Achæan cities seems to have been abnormal, and is certainly difficult to trace. We hear of large populations, subject territories, client tribes of Italian natives, and of what looks like refoundation, sometimes more than once. Only when later events have already brought them into new and formal relations with one another, or with more normal Greek states elsewhere, do these cities seem to take any part in the general history of the Greek world.

In Chalcidice, and still more on the Asiatic coast, the surroundings repeat almost exactly those of the old Minoan societies. The cultivable areas are strictly limited in extent, and separated from one another by rugged hill country. But up to these limits their fertility is great, and it was not a long business to "domesticate" them,[1] as the Greeks put it, and to breed a population commensurate with them. Then difficulties began, in the new regions, as in the old. Hesiod, writing just before the colonizing movements began, and professing to sum up the practical wisdom of the time, recommends the cultivator not to bring up more than one son at home, "for thus wealth will increase in the house." We may infer that if more than one son remained, wealth would not increase, but rather diminish; at all events there would be no margin. And the reason why there would be no food for another mouth was this, that there would be no productive work on the little farm for another pair of hands. That crisis, in fact, had come, in Greece in the eighth century, about which in the modern world we fortunately can

[1] Ἡμερῶδαι the same word is used for taming animals, and for bringing land under cultivation.

still only speculate: the population had overtaken the means of subsistence. Emigration was the only obvious remedy, for persons already in existence; limitation of increase the only precaution possible, if facilities for emigration should cease, even temporarily. Redistribution of estates, and conversion of waste and grazing land, hitherto held in common, into freehold or leasehold allotments were attractive political remedies, but hardly touched the disease.

The question has been often raised, why Greek colonization came to such a standstill in the course of the sixth century. The answer seems now, in the main, to be that almost all the available sites had been taken up already. Agrigentum, founded in 580, was resented by Carthage as an intrusion into the Punic West, and provoked a movement of retaliation which was only stemmed with difficulty by the united Greeks of Sicily, in the generation of the Persian war. Carthage also repelled the Greek attempt to colonize the African Tripoli in 513. Sardinia in the same way was proposed for colonization more than once, between 550 and 500, but the same enemy was beforehand here, and without Tharros, the only corn-land, the rest of the island was not worth winning. Etruria barred the way, north of Greek Campania, and held the Campanian *hinterland* itself till 509. In the Adriatic, the climate and the Illyrians were alike inhospitable: Corinth's few colonies in this quarter clung unusually close to their mother city, and had constant trouble with the interior. The last unoccupied bit of the north Ægean coast was the Strymon valley, assigned to Miletus in the last years of the sixth century, and eventually exploited by Athens after the Persian war.

Eastward, the seaboard was all occupied, already, either by Greeks or their rivals; and the Persian organization of the whole interior made penetration impossible, on any terms that were tolerable to Greeks.

For we must remember once again that in the centuries which preceded the fifth there had been created, in the Greek city states, that uniquely "political animal," Greek man, with standards of conduct, personal and social—as peculiarly *his* as his Hellenic temperament and physique—which postulated,

among other kinds of liberty, freedom from certain kinds of effort, and certain kinds of worry, which he summarily tabooed as "banausic." In Greek theory, from Hesiod's time onwards, the only quite normal life was the "self-sufficient" one; and the only "self-sufficient" life possible under Mediterranean conditions was the old mixed farming where the ancestral estate produced practically everything, and at most the farmers had to go to a town once a year to renew their store of iron. The spread of Greek colonies, outside their natural habitat in the recessed oases of the mountain zone, into regions like Scythia, where there were no earthquakes or olives, and wheat was grown for sale, permitted wholesale interchange of this corn, of which Greek lands could not grow enough, against oil and wine which they could grow economically, and on a larger scale, in proportion as they were free to reduce their corn land. Thus a fresh lease of life was won for the old agriculture, at the price of some specialization, and a corresponding loss of "self-sufficiency." But the corn countries needed other things besides oil and wine, especially textiles, metal work, and other plenishings, to make outlandish homes more Greek-like; and they were prepared to pay handsomely in corn: and so Greek industries arose, concentrated round harbour towns where raw materials accumulated, from over sea and down old land routes from the interior. These industries, and the carrying trade, needed many hands, and the personal capital of technical skill. It was also almost necessary that the industrial Greek should be landless: he could not be in two places at once, in the workshop, where he was needed, and on the farm, where (as we have seen) he was not.

The political fortunes of this new population of industrial Greeks—they called it πλῆθος and ὄχλος because it "filled" and "encumbered" the city streets—do not concern us here; what is important to note is that industry began to provide accommodation for a large increase of population at home, in the same century which saw the last of the great emigrations.

Then two economic disasters happened, almost at the same time; the spread of industrial slavery, and the national quarrel with Persia.

There had probably always been slavery in Mediterranean societies. There was in fact no alternative fate for prisoners of war, except to kill them, which was wasteful, and might lead to reprisals if the captor's people were captured next time. But until the industrial movement began, there was nothing for a slave to do, except to work on the farm or about the house. Only kings and very rich people bought the kidnapped "slaves of luxury" whom foreign traders sometimes offered on the beach. For these the real market was in eastern palaces, and merchant-cities like Tyre. A good slave however made himself useful at the forge or the bench; and when the industrial movement came, it was a windfall to him. His skill, whatever it was, found a new outlet, and as his savings accumulated, the day of freedom drew near; for the Greek slave at all periods, like his prototype, the prisoner of war, was always liable to be ransomed, and was free to ransom himself if and when he could collect the amount of his price. Once freed, we must remember, the slave was his own master, and could choose his own career. In a state as liberal as Athens at the close of the sixth century, he might even become a full citizen, and intermarry with the best, if he was himself a proper man. Greek slavery played thus the very interesting and important part of a recruiting agency, gathering the likeliest raw material from the margins of the Mediterranean world, and particularly from the Balkan and Anatolian highlands; selecting, in long apprenticeship to a Greek master, those who proved themselves most adaptable and efficient under Greek conditions of life; and drafting out into the free community those who could pass as Hellenes. They had, indeed, earned their freedom, for as a Greek would put it, they *were* freemen φύσει "in the manner of their growth," and only slaves by accident of capture or war.[1]

But meanwhile, in the workshop, the master took his commission on the industrial output of the slave; and a master with employer's ability could now find work for a larger number of slaves, and bought what he required from the dealers, just as

[1] On this subject of apprentice-slavery, and on the fate of the refuse, or chattel slaves, see Zimmern, *Sociological Review*, Jan-April. 1909.

others in the same street were taking skilled freemen into their workshops as journeymen, and training young freemen as apprentices. There seems to have been no greater social reluctance among freemen to work side by side with slaves, than there was among citizens to work with resident aliens. But the relations of freeman and slave with their employers differed, and there seems little doubt that it was believed (in Athens for example) that slave labour gave the higher profit to the employer. The effect, as industry grew and became more highly organized and capitalized, was to restrict the demand for free labour, and lower the economic status of the free labourer to a point at which most freemen would rather starve than work, at all events in their own city. Many skilled freemen, however, in the sixth and fifth century accepted the alternative, and left home to join the great army of metics, following the international demand for their skill, and working wherever they got the best terms.

I leave out of account here the tragic Athenian experiment of an Imperial Democracy living less on industrial wages than on administrative pay, not so much because its interest is rather political than economic, as because it has only recently received ample treatment in Dr. Grundy's *Thucydides*. It was in any case an exceptional device, and a disastrous failure, and the attempt was never repeated.

I omit also the last resource of the unwanted freeman, to hire himself as a professional soldier, not so much because the number of mercenaries was negligible until the fourth century, as because this profession is really only a special illustration of that international reserve of fluid labour to which all metics belong; an element in the total population which eludes almost all attempts to measure it; and yet at Athens about the year 300 it formed nearly one-third of the free adult males.

The other economic disaster of the great age of Greece was the national quarrel with Persia. Into the rights and wrongs of this quarrel it would be irrelevant to digress here, further than to note, first, that the national antipathy was long reflected in individual reluctance to cross the frontier and settle and do business within the Persian Empire; and secondly that in the

fourth century, after the expedition of Cyrus and the return of the Ten Thousand, better acquaintance with Persian conditions led to a great relaxation of the old prejudices of individuals, and that this in turn reacted on public opinion so as to tolerate far more easy intercourse between Persia and Greek states than the mere force of Persian gold would explain. But there seems no doubt that in fact the provinces of the Persian Empire remained closed to Greek organized settlement, however widely they were beginning to be permeated with individual Greek traders and concession hunters. It is the persistent plea of Isocrates, by far the clearest sighted of Greek writers of the fourth century, that it is the Greek's own fault that their country has become too narrow for them; that there is more than enough to do in the world, for all the Greeks there are; that the Nearer East is theirs, to go in and possess it, whenever they choose to drop their current quarrels with each other and release it from Persian administration.[1] And it is precisely because this would otherwise have been so easy, and was in fact imminent from the moment of Cyrus' Raid in 401, that Persia spent habitually the large sums, of which we read, to keep the Greek states disunited; and when that policy failed (with the rise of one strong man in Macedon), spent all the energy that was left, in savage undoing of half a century of "peaceful penetration." The "frightfulnesses" of Artaxerxes III. were the last weapon of a policy of despair.

The same situation is revealed as soon as we look below the surface of what at first sight looks like the antithesis of Isocrates' view, in the political thought of Plato and Aristotle. For Plato, the besetting sins of his own age are greed of land, which leads to war, and greed of money, which leads to labour. His aim is to recall men from work to leisure, and from war to peace: and he sees that the reason, why Greek men of the fourth century had as a rule neither leisure nor peace, was the same as had been given of old for the Trojan War: "there were too many men upon the earth." His ideal state is a Greek city of moderate size, sufficiently provided with land to supply all its needs; it will have neither foreign trade nor a foreign policy.

[1] This point is elaborated by Ferguson. *Greek Imperialism*, p. 26.

There will in fact be neither a Scythia nor a Persia in his paradise. But even so, his experience tells him that his paradise will not last long, unless the growth of population can be regulated: otherwise the land will only run short again, and leisure will be curtailed by distracting kinds of work. We must note again that for Plato it is not merely a question of breeding the right kind of citizen, and reclassifying the new generation according to innate ability; it is no less urgent to discover "the Number of the State" and keep the population at that number. His remedy is to abolish the family, which has proved itself, in Greece, unable either to restrict its increase, or to breed for quality; to transfer to the State the responsibility for supplying vacancies by judicious breeding and selection; and to eliminate rigorously all unwanted infants.

Is this reconstruction of society a philosopher's nightmare, or does it stand in any relation at all with practical life? Aristotle, as usual, supplies the connecting link between Platonic theory and Hellenic fact. His ideal State, too, is to have limited territory, commensurate population, and self-sufficient economy. Though he retains the family as the basis of society, he still thinks it possible to regulate the population, and his medical training suggests the means. A good deal can be done also, he thinks, to improve physique, and perhaps also mental qualities, by more careful breeding, and particularly by restricting the age of parenthood. Implied in all this reconstruction is an actual state of things in which not only were unfit children born and reared, but families were improvidently large and infanticide was practised untidily and inadequately. Is this implication supported by what we know of Greek family life?

We have already noted Hesiod's advice not to bring up more than one son, and the question now is, what did he expect his friend to do with the others?

The answer is given with overwhelming evidence by Glotz.[1] There is only occasion here to summarize his argument. In all patriarchal households, the admission of new-comers to the family is at the discretion of the house-father. It makes no difference

[1] In his articles *Expositio* and *Infanticidium* in Daremberg and Saglio's *Dictionnaire des Antiquités*, published respectively in 1892 and 1898, and reprinted with some revisions in his *Etudes sociales et juridiques sur l'antiquité Grecque*. Paris, 1906.

whether they are lambs, kids, or infants: in neither case had they any "right to live," unless the house-father decided to grant it to them. This patriarchal right to determine the fate of his infants (which includes besides his wife's children, the children of his slaves, and any children borne by unmarried daughters) was jealously guarded during the long adjustment of rights between the immemorial family and the nascent State, and only appears in legislative codes on occasions when it is necessary to recognize or interpret it in special or doubtful cases, as at Gortyna, or in Solon's code, or at Delphi in deeds of manumission involving a slave's offspring or expectation of offspring. Only in Sparta, in Thebes, and in Ephesus did the State interfere at all. In Sparta it was to *prevent* a too kind-hearted father from acknowledging an infant for whom when reared there was no expectation of state allotment of land. In Thebes it was to restrain habitual infanticide, partly by penalties, partly by prescribing an alternative way of abdicating parentage, by public sale of the infant. At Ephesus alone, a parent was compelled to prove that he was too poor to rear the child, before he was allowed to get rid of it. Exposure of an infant was a commonplace of legend from Homeric times, and of romance and the stage from Herodotus and the Tragedians onwards; it is explicitly described as a precaution against doubtful paternity, against the worries and expenses of the nursery and education, against the risk and disgrace of leaving descendants inadequately equipped and endowed. The practice was mitigated, it is true, by the common habit of exposing the infant (in its cradle, or a convenient jar) at a time, or in a place, where it was fairly certain to be seen and picked up by passers by; but there was no obligation on anyone to take any notice of it, or to give it anything but a slave's upbringing if he did: nor was it worth while to do more for it, for the original owner might at any time trace and reclaim it without compensation to the foster-parent. But all this was a mitigation only. The expectation of life for a "potted" infant was not many hours; and in an excavated graveyard at Gela in Sicily there are 233 "potted" burials, out of a total of 570 interments.[1]

[1] Wilamowitz-Moellendorff. *Staat und Gesellschaft der Griechen* p. 35, in Hinnenberg's *Kultur der Gegenwart* II., iv. 1. Berlin. 1910.

Thus the philosophers of the fourth century when they commended infanticide as a cure for over-population and its consequences, were only accepting, justifying, and systematizing into greater rigour, a custom which was already well established in the Greek world; and that, not late or sporadically, but widely and at all periods.

We thus reach the conclusion that down to Alexander's time, and as far back as the Homeric Age, and in all probability in Minoan antiquity as well, those districts of the Mediterranean seaboard which were peopled by the Greeks or their indigenous ancestors, were normally full to overflowing. War and disease took heavy toll of lives, and famine was never far off; but these causes only retarded the consummation: "there were too many men upon the earth." Vast fresh regions, thrown open by adventure and discovery in the eighth century, were in full possession by the middle of the sixth, when the conquest of the Persians on the east, the consolidation of the Punic settlements in the west, and abrupt climatic limits to north and south, brought colonial expansion to a standstill, and substituted for it intensive industry in urban areas at home. Slave labour, yielding higher profits, and tolerating narrower quarters, added to the population, altered its social distribution, and diminished the prospect of a competence for the free labourer; and political ideals and prejudices precluded expansion of organized settlements into the continental hinterland of Asia. But, all the while, population grew, and the prospect of "political" life, in the sense in which a Greek understood the only life which he thought worth living, became more and more vague for the majority. Philosophers wanted to replace quantity by quality, and recommended eugenics tempered with infanticide; while politicians preached a national crusade to exploit the Persian Empire. All agreed that once again "there were too many men upon the earth." As Alexander's levy for his Persian adventure amounted to 200,000 foot and 15,000 cavalry, excluding Sparta and Epirus, we may estimate the total population of the Greek states of the peninsula in the year 337 at about four millions, of whom about a million and a half were slaves.

Alexander's conquests more than realized the hopes of Isocrates and the "crusading" school. In less than a century Greek cities were scattered over all the chief centres of cultivation, from the Ægean coast of Asia Minor to Bactria, Scistan and the Punjab; not uniformly, but with regard, on one side, to the strategical necessities of their founders, the Hellenic dynasts who shared Alexander's inheritance; on another, to the main avenues and junctions of a voluminous international commerce; on yet another, to the previous occupation of some regions by those great religious corporations which fill the same place in the Hellenistic East as the monasteries in modern Turkey and mediæval Europe. Over all this inland region, the new movement of colonization—as indeed it was—brought a large increase of inhabitants: for the Greek cities do not seem to have displaced the native population; their citizens were added to it, organized its activities, and made it work harder; realizing Aristotle's ideal system of agriculture, wherein "it is necessary to have the cultivators slaves, or non-Greeks of the countryside," that is to say enserfed indigenes, under Greek direction. Taking ten thousand, Aristotle's minimum population for a well-ordered State, as a rough and quite cautious average for the free population of these new cities, we have an increment of a million persons for every hundred of them; and this does not take account of industrial or commercial slaves not drawn from the old local inhabitants, or of the large floating population of metics engaged in various crafts and professions outside their own city.

These new city foundations were for the most part founded within a century of Alexander's death, and play the same part in the equipment of the Hellenistic world as the colonies had played in the Hellenic. But as in the colonial period, though new foundations are not common after 200 B.C., this was not for lack of will, but of opportunity. Most of the work was done, and the few gaps, in Cilicia, Pontus, and other parts of Eastern Asia Minor, and also in Thrace, only waited for the political opportunity, to receive similar foundations, from Pompey. Julius Cæsar, and Augustus, in the first century B.C., and from Trajan and Hadrian in the second century A.D.

But the inland cities were not all clear gain of population to the East Mediterranean as a whole. The prospect of new and more fertile areas for settlement drew off not merely an already fluid population of mercenaries and metics, and the superfluous inhabitants of old Greece, but induced many cultivators to leave their hereditary farms, which were often cultivated at a loss under the new conditions of production and transport. The great industrial and commercial centres, such as Athens and Corinth, retained their population, and perhaps increased it; a few older cities found trade coming back to them, like Chalcis and Eretria; other cities, of second or third rank before, like Argos, Delos, and Histiaea now offered fresh facilities and attracted large numbers; but the country-side states, which had rested throughout on their own land and its produce, suffered a steady drain: and these were a large majority.

The only exceptions are in the districts of north-western Greece, Ætolia, Acaranania, and Epirus, and from thence away into Illyria. These now seem to have increased their indigenous population, and yet to have maintained themselves from their own resources. As this prosperity is shared by the comparatively well forested districts of Achæa and Elis, and is preceded by a similar access of population in Macedon from the middle of the fourth century to the middle of the third, it looks as though the cause was geographical. Probably we have to look for a period of comparatively moderate rainfall, giving greater security for highland crops in the north-west, and at the same time making those of the south-east more precarious than usual. But there are no direct observations, and the north-western region is still so imperfectly explored that the archæological evidence of cultivation-terraces and farmsteads is not yet available. The only survey of sufficient scope and accuracy is Woodhouse's *Ætolia*, and this was published just too early to take this kind of problem into account. Philippson's geographical work in Thessaly and Epirus[1] lays the foundation for a survey of the vegetation and climate, and Mr. Maurice Thompson's recent paper on Deforestation in Ancient Greece[2] is mainly based on Thessalian observations.

[1] Philippson. *Thessalien und Epirus.* 1897.

[2] Thompson. *Proc. University of Durham Philosophical Society.* V. 2. Newcastle-on-Tyne. 1913.

It is instructive to note, however, that as the mode of life in the north-west becomes more Hellenic, we begin to have evidence of concomitant slavery. For the period covered by the Delphic manumission records, there is little to choose between one district of Northern Greece and another in respect of frequency of manumissions. There is in fact no longer any distinction in this region between slave-free and slave-holding States.[1] And the same applies to Peloponnese, where Arcadia and Achæa seem earlier to have been almost slave-free.

In the year 168 B.C. the population of Epirus seems to have been about 300,000, or 38 to the square kilometre; and if this density was maintained over the whole of Greece including Macedon, the total population must be estimated at 4,370,000. This, however, allows a million for Macedon, which is probably excessive, in view of the terrible drain of the wars with Rome. Even including, therefore, the large increase of population in the north-west, the total population of Greece had risen but little, in a century and a half, above the four millions which are estimated for the beginning of Alexander's reign.

In the second century the tide had turned, at all events in the Greek peninsula; and Polybius[2] had no doubt as to the cause. Love of display, love of money, and love of ease, are the three reasons which he assigns for the reluctance of his contemporaries not merely to rear children, but to marry at all. Families, usually limited to one or two, "so as to leave these rich," were brought up extravagantly as a "leisured class," and given no incentive to work. We have seen already that in early Greece the same motive had been at work. In its earlier manifestations it had had its admirable side. It was a new idea in national economy to prefer quality to numbers; to insist on what we should now call a "standard of living" which could only be reached or maintained by making something other than the food-quest a first charge on a man's time; and to dread the accumulation of forms of wealth which in simple and rather rigorous surroundings there was no opportunity to use, except to sink the neighbours, less fortunate or less capable, ever deeper

[1] Beloch. *Bevölkerung*, p. 497.
[2] Polybius, 36, 17.

into debt, on mortgaged farms which (for whatever reason) no longer paid their way. It had been the supreme boast of fifth century statemanship that it was possible in Athens φιλοκαλεῖν μετ' εὐτελείας, to pursue excellence on limited means; and to devote the intellect to make the content of life wider and deeper, instead of merely more comfortable and secure. The achievements of that ambition we know; and our best efforts now are dedicated to the same end, under external conditions which are in many ways far more favourable. To take only single instances, thanks to coal and iron we reckon mechanical power in foot-tons and generate it continuously, where a Greek worked in foot-pounds, with an interval for meals, and for sleep; and we can also apply it continuously, for we have artificial light in commensurate profusion. But it was the fatal counterpart of Hellenic intellectualism, that the "liberty" maintained in the fifth century in spite of Persia, and extended in the fourth at Persia's expense, seemed in the third to have achieved its purpose. Even in the generation of Alexander and Aristotle almost everything seemed to have been conquered, geographically, and almost everything culturally to have been found out. The art of living well under Mediterranean conditions had been discovered, and formulated, and standardized, like so much of the life of modern Europe in the middle of the nineteenth century; and the population of the Greek cities, old and new, settled down to enjoy themselves in the world they had made.

But they had omitted two provisions, the lack of which cost them the future. Their achievements had been the work of societies wholly male, and almost wholly middle-aged, as we count the "ages" of a man. Athens, at its very best, had been a brilliant but temporary exception: after Alcibiades we have no "precocious genius" even there; and Alexander's greatest stroke of luck was that his father's murder put him on the throne at twenty. There had been, too, brilliant women in the sixth century, particularly in some eastern cities; and there were brilliant queens in the noble houses of Macedonian decent, for Macedon had a larger place for women in its life than Greece. But these were the exceptions, like Alcibiades and Alexander

among the men: the type was that poor little untaught child, Ischomachus' wife, in Xenophon's *Æconomicus*.

The fatal neglect of the Greeks to educate systematically either their children or their women perpetuated this onesidedness, and canonised the club aspect of their social life. Plato's remedy had been to teach the young to think accurately for themselves, and to bring the women into the public and social life hitherto reserved to the men. Aristotle, impressed once again by his medical experience, despaired of making citizens out of the female patients of the fourth century, and failed to see the bearing of his own views on education. Moreover the expensiveness of children, serious enough when they were boys, became oppressive when they were girls: as the proverb put it "Raise a son even if you are poor; expose a daughter even if you are rich." We have probably to assume, as in all the south-east of Europe to-day, a marked minority of females in the whole population; and when we consider also the time-consuming tasks which made up woman's work, when they not only washed and cooked, but made the clothes and the cloth, ground the corn, carried the water, and collected the fuel, it is clear that a Greek woman had not much time to spare for accomplishments, any more than her modern Greek sister has.

The result of this intellectual divorce between men and women was an increasing break-up of home life. The women lived at home, the men at the club; and where their heart was, there they left their treasure also. Side by side with ever-increasing difficulty in finding the means to bring up a family, or even a single child, in an ultimately clubable style, stand the ever-increasing endowments of the gymnasia and the thiasoi, the trust-funds held for dining clubs, the donations of plate, all the trival old-bachelordom which is the background of the equally trivial public life of Hellenistic towns. No wonder that even in the fourth century we begin to have complaints that "children are such a nuisance in a house."

Such "emancipation of women" as there was did not help matters much. The wider scope allowed to Macedonian women set a fashion in high places which was easy to misinterpret, and easier still to travesty. It was a fresh excuse for expenditure

among the men, already overloaded by the double effort to keep up appearances at home as well as at the club; and a fresh excuse for postponing or avoiding matrimony.

To keep the treatment of a large subject within bounds I have deliberately confined myself to the course of events in Greece; but the history of the Italian peoples presents no factor which is not present in some degree in Greek society. There is the same type of indigenous culture, less intensely developed, and never centralized round a western Knossos; the same period of intrusions from abroad, less complex, but leading to much the same social and economic effects. Organized colonization is represented by the institution of the "Sacred Spring," and the southward propagation of the Sabellian highlanders. The cleruchies of Athens, and the tied colonies of Corinth, have their counterpart in the Roman *Coloniæ*, and the spread of the Italian merchant and prospector repeats the part played by the floating population of resident aliens in the Greek world, before, and still more after Alexander's time. The only point of contrast is that whereas Greece never ceased to own itself, to have its special national way of life, and to work out its own destiny almost impervious to neighbouring civilizations in all essential points, Italy and, in less measure, all the Western Mediterranean had been fringed with Greek cities, and penetrated with Greek traders, since the seventh century at least, and South Italy, in particular, had become very greatly Hellenized a century before the Roman conquest: and from the moment when each region comes under that Hellenic spell, the history of its population merges in that of the Hellenistic world, with its industrial slavery, its secluded womanhood, its limited families and its pretext of high living to excuse a low birth-rate.

So serious was the depopulation towards the end of the first century B.C., after a century of intermittent wars and unprecedented loss of life and waste of capital equipment, that it became the first task of Augustus, at the close of the Civil Wars, to take stock of the whole population and resources of the region, and attempt to give new sanctions to marriage and family life of the older type. For the moment he succeeded, and a slightly under-populated world profited by the general peace

to recuperate and replenish itself. But the effect was transitory. Hellenistic culture, with its rather tawdry ideals and its vicious economic system had too firm a hold, and even the imperial peace did not maintain the population permanently at the restored level. By the middle of the second century the estimates begin to sink again; and a first symptom of what is coming is the new habit of endowing orphanages, for the foundlings of whom the State began to discover that it had need, though their parents continued to expose them.

Only a fresh morality, based on quite a different set of national habits, and bred in another environment altogether, could hope to break the spell of this calculated hedonism. The first recorded protest against infanticide is that of the Jewish publicist Philo, in the middle of the first century A.D. It comes, that is, from the one people, of pastoral nomad descent, which after early translation to a highland region, under Mediterranean climatic control, and populated already with societies of essentially Mediterranean regime, deliberately kept itself aloof from the "works of the heathen that dwell in the land," and in spite of incredible difficulties, and repeated failures and defections, had maintained that principle of conduct in Philo's time for over twelve hundred years already. In spite of their abstinence from infanticide, the Israelites maintained themselves in economic equilibrium in their narrow territory down to the catastrophe of the Captivity. After the Return, their continued care for their children gave them the means not only to replenish Palestine very rapidly, and repair the waste of desperate fighting, but to spread in great numbers over a large part of the ancient world. Of the qualities which enabled them to do this, it would be impossible to treat in a concluding paragraph. I only note the fact of the antecedents and discipline, under which that new view of the value of individual life was matured, which has dominated the mediæval and most of the modern world, and marks them off completely from the ancient Mediterranean regime with which this essay is concerned.